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Australian Patent Office
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Attention: Ms. Anita Premkumar

Dear Sirs

PCT INTERNATIONAL APPLICATION NO. PCT/SG2003/000274
FOR "METHOD"
AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH

This is a response to the Written Opinion under PCT Rule 66 dated 2 August 2005.

We enclose amended claims on page 42. For ease of reference, we also enclose a marked up copy of the amended pages.

The effect of the amendment is to depend on the subject matter of claim 25 on claims 20-23.

Inventive step

The examiner considers claims 31-33 to lack an inventive step.

We respectfully disagree and point out to the examiner that it is not correct to argue that the separate components of the combination taken by themselves are known or obvious and that therefore the whole subject-matter claimed is obvious.

There is nothing in the prior art documents D1-D4 to suggest combining a dUTP and an agent, that is capable of increasing the polarity of the replication reaction medium and/or act as a local dehydrating agent, in a kit.

The prior art documents do not suggest the encouragement of U residues to base pair with incoming G residues with the aid of an agent that enhances the polar environment of the replication reaction medium. Therefore, from a reading of D1-D4, a person skilled in the art would not arrive at a kit as defined in claim 31.

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Therefore, we submit that claim 31 and its dependent claims 32-33 are inventive over the teachings of the prior art.

Certain observations

1. The examiner considers claims 31-33 not to be fully supported by the specification.

We respectfully disagree and draw the examiner's attention to page 16 line 26 to page 17 line 7 of the specification. A person skilled in the art would be able to arrive at the invention as claimed in claims 31-33 on reading the disclosure of the invention as a whole as set out in the description. Therefore, we submit that claims 31-33 are fully supported by the specification.

2. The examiner considers claims 25-30 to lack an essential feature of the invention and are not fully supported by the description.

Claim 25 has now been amended to refer to a mutant AlbD polypeptide prepared by the method of any of claims 20-23. Therefore, we submit that newly amended claim 25 and its dependent claims 26-30 provide the essential features of the invention. Further, we submit that the claims are within the scope of the earlier searched claims.

In light of the above, we respectfully request the examiner's favourable reconsideration of the present application. Consequently, we look forward to a favourable International Preliminary Examination Report.

Yours faithfully

Edmund

Edmund Kok
Patent Attorney
ALBAN TAY MAHTANI & DE SILVA

Encl.

DNA molecule accordingly to the method of any of Claims 1 to 12, (b) expressing the polypeptide encoded by the DNA molecule whose GC base pair content has been enriched in step (a), and (c) selecting a polypeptide with altered properties.

21. A method according to Claim 20 wherein the polypeptide is any of an enzyme, an antibody chain or an antigen.

22. A method according to Claim 21 wherein the polypeptide is an enzyme which has been selected in step (c) for improved catalytic properties.

23. A method according to Claim 22 wherein the enzyme is encoded by the *albD* gene of *Pantoea dispera*.

24. A mutant polypeptide prepared by the method of any of Claims 20 to 23.

25. A mutant AlbD polypeptide prepared by the method of any of Claims 20 to 23 wherein Ser40 has been replaced by another amino acid residue.

26. A mutant AlbD polypeptide according to Claim 25 wherein Ser40 has been replaced with Gly.

27. A mutant AlbD polypeptide according to Claim 25 or 26 wherein Glu25 has been replaced by Arg, Lys27 has been replaced by Glu and Ser40 has been replaced by Gly.

28. A polynucleotide encoding the mutant AlbD polypeptide according to Claim 25.

DNA molecule accordingly to the method of any of Claims 1 to 12, (b) expressing the polypeptide encoded by the DNA molecule whose GC base pair content has been enriched in step (a), and (c) selecting a polypeptide with altered properties.

21. A method according to Claim 20 wherein the polypeptide is any of an enzyme, an antibody chain or an antigen.

22. A method according to Claim 21 wherein the polypeptide is an enzyme which has been selected in step (c) for improved catalytic properties.

23. A method according to Claim 22 wherein the enzyme is encoded by the *albD* gene of *Pantoea dispera*.

24. A mutant polypeptide prepared by the method of any of Claims 20 to 23.

25. A mutant AlbD polypeptide prepared by the method of any of Claims 20 to 23 wherein Ser40 has been replaced by another amino acid residue.

26. A mutant AlbD polypeptide according to Claim 25 wherein Ser40 has been replaced with Gly.

27. A mutant AlbD polypeptide according to Claim 25 or 26 wherein Glu25 has been replaced by Arg, Lys27 has been replaced by Glu and Ser40 has been replaced by Gly.

28. A polynucleotide encoding the mutant AlbD polypeptide according to Claim 25.